

PATENT APPLICATION  
Mo5000ND  
NIT-259

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

APPLICATION OF	)	
SHINICHI TSUBOI ET AL	)	GROUP NO.: 1616
SERIAL NUMBER: 09/886,197	)	
FILED: JUNE 21, 2001	)	EXAMINER: S. N. QAZI
TITLE: AGENTS FOR PRESERVING	)	
TECHNICAL MATERIALS AGAINST	)	
INSECTS	)	

**Appeal Brief**

Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450

Sir:

This Brief, submitted in triplicate, is an appeal from the Final Office Action of the Examiner dated May 15, 2003, in which rejection of Claims 7, 9, 10, 14, and 19-21 was maintained.

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an enveloped addressed to: Commissioner for Patents, Alexandria, VA 22313-1450

1/7/04

Date

Richard E. L. Henderson, Reg. No. 31,619

Name of appellant, assignee or Registered Representative

*Richard E. L. Henderson*

Signature

January 7, 2004

Date

01/13/2004 AWONDAF1 00000001 502510 09886197

01 FC:1402 330.00 DA

#### I. REAL PARTY IN INTEREST

The real parties in interest for the present appeal are the assignees Nihon Bayer Agrochem K.K. and Bayer CropScience AG.

#### II. RELATED APPEALS AND INTERFERENCES

Appellants are unaware of other appeals or interferences that will directly affect or be directly affected by or having a bearing on the present appeal.

#### III. STATUS OF CLAIMS

The above-referenced application was filed with Claims 1-6, which were canceled in a Preliminary Amendment filed with the current application in favor of Claims 7-28. Claims 22-24 and 26-28 were cancelled and Claims 29-30 were added in an Amendment dated January 28, 2002. Claims 8, 11-13, 15-18, 25, 29, and 30 were cancelled in an Amendment dated September 6, 2002. Claims were amended in these Amendments, as well as in an Amendment filed February 21, 2003.

Claims 7, 9, 10, 14, and 19-21 are pending but stand rejected. Claims 7, 9, 10, 14, and 19-21 are the subject claims of this appeal.

#### IV. STATUS OF AMENDMENTS

Appellants filed no amendments after final rejection.

#### V. SUMMARY OF THE INVENTION

Appellants' invention relates to a method of protecting technical materials by application of a composition comprising from about  $10^{-6}$  to 30 parts by weight of 1-(6-chloro-3-pyridylmethyl)-2-nitroimino-imidazolidine (i.e., imidacloprid) and from about 0.01 to about 90 parts by weight of  $\pm\alpha$ -[2-(4-chlorophenyl ethyl)]- $\alpha$ -(1,1-dimethylethyl)-1H-1,2,4-triazole-1-ethanol (i.e., tebuconazole).

## VI. ISSUES

A. Whether Claims 7, 9, 10, 14, and 19-21 are unpatentable under 35 U.S.C. 103(a) over U.S. Patent 4,742,060 (“Shiokawa et al”); and *The Pesticide Manual*, 9th edition, ed. C.R. Worthing (Surrey, UK: British Crop Protection Council, 1991), pages 785 and 831-834 (“Worthing”).

B. Whether Claims 7, 9, 10, 14, and 19-21 are unpatentable under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 1-5 of Heuer et al.

## VII. GROUPING OF CLAIMS

Claims 7, 9, 10, 14, and 19-21 are appealed together.

## VIII. ARGUMENTS

A. Claims 7, 9, 10, 14, and 19-21 Are Not Rendered Obvious by Shiokawa et al and Worthing.

Appellants respectfully submit that the Examiner has erred in concluding that their claims are rendered obvious by Shiokawa et al and Worthing.

### 1. *Shiokawa et al*

Shiokawa et al discloses compounds having a formula that encompasses within its broad scope 1-(6-chloro-3-pyridylmethyl)-2-nitroimino-imidazolidine (i.e., imidacloprid), the first component of the composition used in Appellants’ claimed method. Although Shiokawa et al specifically discloses this compound – under the name 1-(2-chloro-5-pyridylmethyl)-2-(nitroimino)imidazolidine – at column 12, lines 32-33, the compound is disclosed only as one of a host of compounds in an extensive list at columns 11-12 and by its formula in Example 11-ii (column 58, line 35) but again only as one of a vast array of compounds described in the Examples at columns 54 to 202.

Furthermore, the only reference in Shiokawa et al to any kind of additional active components is found in a very general statement at column 53, line 61, through column 54, line 2, which identifies such compounds only as “insecticides, baits, sterilizing agents, acaricides, nematocides, fungicides, growth-regulating

substances or herbicides” and further defines insecticides only to the extent of identifying “phosphates, carbamates, carboxylates, chlorinated hydrocarbons, phenylureas, substances produced by microorganisms.” Nowhere does Shiokawa et al disclose tebuconazole, by name or formula. Nowhere does Shiokawa et al even remotely suggest a combination of imidacloprid and tebuconazole, much less disclose a combination of imidacloprid and tebuconazole having the specific relative amounts specify by Appellants.

Appellants maintain that Shiokawa et al therefore provides no motivation to make and use the extremely narrowly defined combination specified by Appellants.

Appellants therefore respectfully submit that their claims are not rendered obvious by Shiokawa et al.

## 2. *Worthing*

Worthing – i.e., *The Pesticide Manual* – at page 785 discloses tebuconazole among a vast array of known pesticides. Worthing also discloses formulations containing tebuconazole in combination with triadimefon (i.e., as “Foliar BT”), carbendazim (i.e., as “Horizon C”), and triadimenol (i.e., as “Matador”). However, all four of these compounds are fungicides. Worthing et al does not teach combinations of tebuconazole with any other types of active ingredients. Worthing therefore provides no motivation whatsoever to combine tebuconazole with insecticides, much less with the specific compound imidacloprid at specific relative amounts.

Appellants therefore respectfully submit that their claims are not rendered obvious by Worthing.

## B. Claims 7, 9, 10, 14, and 19-21 Are Not Unpatentable Under the Judicially Created Doctrine of Obviousness-type Double Patenting Over Claims 1-5 of Heuer et al.

Appellants respectfully submit that the Examiner has erred in concluding that their claims are unpatentable under the judicially created doctrine of obviousness-type double patenting over Claims 1-5 of Heuer et al.

The Examiner stated in the Final Office Action dated May 15, 2003, that she had withdrawn rejections under both 35 U.S.C. 102 and 35 U.S.C. 103 based on Heuer et al. Appellants note at the outset that no previous Office Actions have included an obvious rejection under 35 U.S.C. 103 based on Heuer et al. Appellants, however, have previously argued – without objection by the Examiner – that their Mo5000ND

claims are neither anticipated nor rendered obvious by Heuer et al. See Appellants' Amendment dated February 21, 2003, at pages 7-8.

Heuer et al discloses wood preservative combinations containing hexaconazole and/or metconazole and further known compounds. E.g., column 1, lines 6-13. Neither hexaconazole nor metconazole is specified in Appellants' claims. Heuer et al throughout focuses on combinations containing hexaconazole and synergistically acting insecticides and optional fungicides (e.g., column 1, lines 34-55, as well as column 1, line 56, through column 6, line 6, and column 8, line 56, through column 9, line 26), although it must be noted that the only claims specifically directed to compositions containing hexaconazole are dependent Claims 3 and 4. [Base Claim 1 specifically names only metconazole and imidacloprid.] Although the general disclosure of Heuer et al does refer to tebuconazole (e.g., column 1, lines 65-67, and column 2, line 9) and to imidacloprid (e.g., column 2, lines 54-56, and column 3, line 30), these compounds are disclosed only as isolated members of a multitude of possible additional components that can be used in combination with hexaconazole. Of the claims, only Claim 3 is directed to compositions containing both tebuconazole and imidacloprid but even then only in a three-part composition that must always contain metconazole. Appellants submit that Heuer et al fails to suggest that a combination of imidacloprid and tebuconazole could provide the advantages the reference describes, much less suggest their use in specific ratios as claimed by Appellants.

Appellants therefore respectfully submit that their claims are patentably distinct from the claims of Heuer et al and thus should not be subject to an obviousness-type double patenting rejection.

C. Conclusions

Appellants submit that Shiokawa et al and Worthing provide no motivation to make and use their specified combination of tebuconazole and imidacloprid and therefore respectfully submit that their claims are not rendered obvious by Shiokawa et al or Worthing.

Appellants also submit that their claims are patentably distinct from Heuer et al and should not be subject to an obviousness-type double patenting rejection.

Appellants, therefore, submit that each of the Examiner's rejections is in error and respectfully request that the rejections be reversed and that Claims 7, 9, 10, 14, and 19-21 be allowed.

Respectfully submitted,

By Richard E. L. Henderson  
Richard E. L. Henderson  
Attorney for Appellants  
Reg. No. 31,619

Bayer CropScience LP  
100 Bayer Road  
Pittsburgh, Pennsylvania 15205-9741  
(412) 777-3809  
FACSIMILE PHONE NUMBER:  
(412) 777-3902

/jme/RELH/RH0416

## APPENDIX: CLAIMS ON APPEAL

Claim 7. A method of protecting a technical material comprising applying to the technical material a composition comprising:  
from about  $10^{-6}$  to 30 parts by weight of 1-(6-chloro-3-pyridylmethyl)-2-nitroimino-imidazolidine; and  
from about 0.01 to about 90 parts by weight of  $\pm\alpha[2-(4\text{-chlorophenyl ethyl})-\alpha-(1,1\text{-dimethylethyl})-1\text{H-}1,2,4\text{-triazole-}1\text{-ethanol}]$ .

Claim 9. The method of Claim 7, wherein the technical material is selected from the group consisting of wood, composite wood materials, paper, leather, leather products, synthetic polymers, natural polymers, textiles, and combinations thereof.

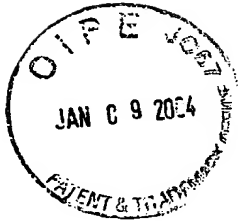
Claim 10. The method of Claim 9, wherein the technical material is wood or a composite wood material.

Claim 14. A method of protecting a wood product selected from the group consisting of wood and wood composites against attack by insects comprising applying directly thereto a composition comprising an amount sufficient to effect protection thereof of 1-(6-chloro-3-pyridylmethyl)-2-nitroimino-imidazolidine and from 0.01 to 90 parts by weight of  $\pm\alpha[2-(4\text{-chlorophenyl ethyl})-\alpha-(1,1\text{-dimethylethyl})-1\text{H-}1,2,4\text{-triazole-}1\text{-ethanol}]$ , wherein the composition is applied in at least one of soaking said wood product in or with said compound, impregnating said wood product with said compound, brushing said compound onto said wood product, spraying said compound onto said wood product, and dipping said wood product in said compound.

Claim 19. The method of Claims 7 or 14, wherein the composition comprises from about 0.0005 to 15 parts by weight of the 1-(6-chloro-3-pyridylmethyl)-2-nitroimino-imidazolidine and from about 0.05 to about 50 parts by weight of the  $\pm\alpha[2-(4\text{-chlorophenyl ethyl})-\alpha-(1,1\text{-dimethylethyl})-1\text{H-}1,2,4\text{-triazole-}1\text{-ethanol}]$ .

Claim 20. The method of Claims 7 or 14, wherein the composition comprises from about 0.005 to 2 parts by weight of the 1-(6-chloro-3-pyridylmethyl)-2-nitroiminoimidazolidine and from about 0.1 to about 30 parts by weight of the  $\pm\alpha$ [2-(4-chlorophenyl ethyl)- $\alpha$ -(1,1-dimethylethyl)-1H-1,2,4-triazole-1-ethanol].

Claim 21. The method of Claim 7, wherein the technical material is a wood product.



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Name of appellant, assignee or Registered Representative

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January 7, 2004

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Claim 9. The method of Claim 7, wherein the technical material is selected from the group consisting of wood, composite wood materials, paper, leather, leather products, synthetic polymers, natural polymers, textiles, and combinations thereof.

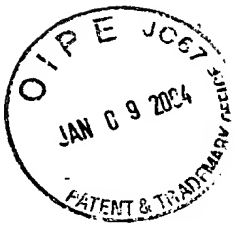
Claim 10. The method of Claim 9, wherein the technical material is wood or a composite wood material.

Claim 14. A method of protecting a wood product selected from the group consisting of wood and wood composites against attack by insects comprising applying directly thereto a composition comprising an amount sufficient to effect protection thereof of 1-(6-chloro-3-pyridylmethyl)-2-nitroimino-imidazolidine and from 0.01 to 90 parts by weight of  $\pm\alpha$ [2-(4-chlorophenyl ethyl)- $\alpha$ -(1,1-dimethylethyl)-1H-1,2,4-triazole-1-ethanol, wherein the composition is applied in at least one of soaking said wood product in or with said compound, impregnating said wood product with said compound, brushing said compound onto said wood product, spraying said compound onto said wood product, and dipping said wood product in said compound.

Claim 19. The method of Claims 7 or 14, wherein the composition comprises from about 0.0005 to 15 parts by weight of the 1-(6-chloro-3-pyridylmethyl)-2-nitroimino-imidazolidine and from about 0.05 to about 50 parts by weight of the  $\pm\alpha$ [2-(4-chlorophenyl ethyl)- $\alpha$ -(1,1-dimethylethyl)-1H-1,2,4-triazole-1-ethanol.

Claim 20. The method of Claims 7 or 14, wherein the composition comprises from about 0.005 to 2 parts by weight of the 1-(6-chloro-3-pyridylmethyl)-2-nitroiminoimidazolidine and from about 0.1 to about 30 parts by weight of the  $\pm\alpha$ [2-(4-chlorophenyl ethyl)]- $\alpha$ -(1,1-dimethylethyl)-1H-1,2,4-triazole-1-ethanol.

Claim 21. The method of Claim 7, wherein the technical material is a wood product.



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LETTER

Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Enclosed herewith are three copies of an Appeal Brief in the matter of the subject Appeal. Please charge the fee for filing the Brief, \$330.00, to our Deposit Account Number 50-2510.

Respectfully submitted

By Richard E. L. Henderson  
Richard E. L. Henderson  
Attorney for Appellants  
Reg. No. 31,619

Bayer CropScience LP  
100 Bayer Road  
Pittsburgh, Pennsylvania 15205-9741  
(412) 777-3809  
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/jme/RELH/RH0417

I hereby certify that this correspondence is being deposited  
with the United States Postal Service as first class mail in an  
enveloped addressed to: Commissioner for Patents,  
Alexandria, VA 22313-1450 1/7/04

\_\_\_\_\_  
Date  
Richard E. L. Henderson, Reg. No. 31,619  
Name of appellant, assignee or Registered Representative  
Richard E. L. Henderson  
Signature  
January 7, 2004  
Date